

**DLAM 8210.1  
AFR 55-22V1  
AR 95-20  
NAVAIRINST3710.1C**



**DEPARTMENT OF DEFENSE**

**DEFENSE  
LOGISTICS  
AGENCY**

**Cameron Station,  
Alexandria, Virginia 22304-6100**

**CONTRACTOR'S FLIGHT  
AND  
GROUND OPERATIONS**

**VOLUME 1**

**NOVEMBER 1991**

**S/N 0808LD0557060**

DEFENSE LOGISTICS AGENCY,  
DEPARTMENTS OF THE ARMY, THE NAVY,  
AND THE AIR FORCE  
WASHINGTON, DC

DLA-QF  
22 Nov 91

VOLUME 1

FOREWORD

(Supplementation is permitted by the Components.)

Volume 1 establishes requirements for all ground and flight operations involving all work performed on Government aircraft. Volume 2 establishes policy and procedures to be followed by Government Flight Representatives (GFRs). Service contracting activities will include chapters 1 through 9 of volume 1 and applicable supplements in all contracts involving Government aircraft for which the Government is assuming some of the risk of loss or damage. This volume describes the content of the contractor's aircraft ground and flight operations procedures (hereafter identified as Procedures) and defines the method of obtaining approval for these Procedures. It provides for the delegation of authority for such approvals, regardless of Service affiliation. This volume applies to all Army, Navy, Air Force, and DLA GFRs who approve contractor's Procedures and to contractor personnel whose duties pertain to the operation of any aircraft for which the Government is assuming some of the risk of loss or damage. Volume 1 has been coordinated with and concurred in by the Military Services (hereafter referred to as the Services). This volume does not apply to undergraduate contract flight training, operation of aircraft leased from the Government by a contractor in accordance with 10 U.S.C. 2667, or Corps of Engineers, Civil Works owned and operated aircraft. It is affected by the Privacy Act of 1974 and requires the collection and maintenance of information protected by the Privacy Act of 1974. The authorities to collect and maintain the records prescribed in this regulation are 10 U.S.C. 8013 and 44 U.S.C. 3101. Each form required by this manual which requires a Privacy Act statement has that statement incorporated in the body. Recommendations for new policies or procedures should be submitted through channels to HQ DLA, ATTN: DLA-QF (the Office of Primary Responsibility (OPR) for this joint military regulation) for review. Changes will be coordinated with all Services and DLA prior to incorporation into this manual. For specific guidance from each DoD Component, contact the following:

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BY ORDER OF THE DIRECTOR, DEFENSE LOGISTICS AGENCY, AND THE SECRETARIES OF  
THE ARMY, THE AIR FORCE, AND THE NAVY

3 Encl

1. Format for Request for Approval  
for Qualification Training
2. Format for Request for Approval  
of Contractor Flight Crewmember
3. Format for Designating Government  
Flight Representatives

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This DLAM supersedes AFR 55-22/AR 95-20/NAVAIRINST 3710.1B/DLAR 8210.1, 3 Apr 79, and  
Change 1.

DLAM 8210.1, Vol 1  
AFR 55-22V1  
AR 95-20  
NAVAIRINST 3710.1C

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Army: (2 copies)

**COORDINATION: DLA-A, DLA-C, DLA-G,**  
DLA-KS, DLA-K, DLA-LR, DLA-LP, DLA-L,  
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## GLOSSARY OF ACRONYMS

ACO	Administrative Contracting Officer
AFLC	Air Force Logistics Command
AFSC	Air Force Systems Command
AMOC	Aircraft Maintenance Officers Course (Army)
APU	Auxiliary Power Unit
AVSCOM	U.S. Army Aviation Systems Command
DCMD	Defense Contract Management District
DFARS	DoD Federal Acquisition Regulation Supplement
DLA	Defense Logistics Agency
DoD	Department of Defense
FAA	Federal Aviation Administration
FAR	Federal Acquisition Regulation
FCIF	Flight Crew Information File
FE	Flight Examiner
FOD	Foreign Object Damage
GFR	Government Flight Representative
GTV	Ground Test Vehicle
HCA	Heads of Contracting Activities
HQDA	Headquarters, Department of the Army
IP	Instructor Pilot
MACOM	Major Command (Army)
MAJCOM	Major Command (Air Force)
MSL	Mean Sea Level
MTP	Maintenance Test Pilot
NAVAIRSYSCOM	Naval Air Systems Command
NAVSAFCEM	Naval Safety Center
OMB	Office of Management and Budget
OPR	Office of Primary Responsibility
PCO	Procuring Contracting Officer
SSAN	Social Security Number
TPS	Test Pilot School
USAALS	U.S. Army Aviation Logistics School
USASC	U.S. Army Safety Center

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2. Format for Request for Approval of Contractor Flight Crewmember
3. Format for Designating Government Flight Representatives

## Chapter 1

### TERMS EXPLAINED

#### SECTION A - TERMS RELATING TO GOVERNMENT

**1-1 Approving Authority.** The commander or designee of one of the following organizations having the administrative responsibility for a particular contractor facility in accordance with DLAH 4105.4, DoD Directory of Contract Administration Services Components:

a. Commander, U. S. Army Aviation Systems Command or Procuring Activity Major Command (MACOM).

b. Naval Air Systems Command (NAVAIRSYS-COM).

c. Air Force Heads of Contracting Activities (HCA) or their designee.

d. Commander, Defense Contract Management District (DCMD).

**1-2 Government Flight Representative (GFR).** That officer in aviation service (including operational and nonoperational aviation positions) or Government civilian in aviation service to whom the approving authority has delegated responsibility for approval of contractor flights, Procedures, flight crewmember/personnel and ensuring contractor compliance with applicable provisions of this manual.

**1-3 Procuring Contracting Officer (PCO) and Administrative Contracting Officer (ACO).** Individuals designated in accordance with the Federal Acquisition Regulation (FAR) and defined in FAR 2.101.

#### SECTION B - TERMS RELATING TO CONTRACTOR

**1-4 Contractor.** Any individual, corporation, or other entity whose personnel may operate aircraft for which the Government assumes at least some contractual liability for loss or damage to the aircraft.

**1-5 Flight Crewmember.** Any instructor/flight examiner, pilot, copilot, flight engineer/mechanic, navigator, weapons system operator, bombardier navigator, radar intercept operator, sensory systems operator, boom operator, crew chief, loadmaster,

remote piloted vehicle operator, defensive/offensive system operator, and other flight manual handbook identified crewmember when assigned to their respective crew positions to conduct any flight under the contract.

**1-6 Noncrewmember.** Personnel designated by the contractor to perform a function while the aircraft is in flight; e.g., technicians, observers, inspectors, systems engineers, and photographers.

**1-7 Ground Personnel.** Personnel designated by the contractor to perform ground operations in support of flight operations, to include aircraft rescue and firefighting.

**1-8 Requesting Official.** The member of the contractor's first level of management (president, vice president) or appointed designee authorized to sign a request for GFR approval for qualification training of contractor personnel or for flight crewmember/personnel (see enclosures 1 and 2).

**1-9 Aviation Safety Official.** The individual assigned primary responsibility for developing and administering the contractor's aviation safety program. Normally this individual should be a qualified flight crewmember who has related aviation safety administration experience.

**1-10 Flight Operations.** Those aircraft operations where intent for flight exists for which the Government assumes at least some of the risk of loss or damage under the DoD Federal Acquisition Regulation Supplement (DFARS), Part 252.228-7001/7002, Ground and Flight Risk/Flight Risks. The clauses define "flight" as follows: "For land based aircraft, 'flight' shall commence with the taxi roll from a flight line on the Contractor's premises; with respect to seaplanes, 'flight' shall commence with the launching from a ramp on the Contractor's premises and continue until the aircraft has completed its landing run upon return and is beached at a ramp on the Contractor's premises; with respect to helicopters, 'flight' shall commence upon engagement of the rotors for the purpose of take-off from the Contractor's premises and continue until the aircraft has returned to the ground on the Contractor's premises and the rotors are dis-



engaged; and with respect to vertical takeoff aircraft, 'flight' shall commence upon disengagement from any launching platform on the Contractor's premises." Additionally, a high-speed taxi test is considered a flight operation for the purposes of this manual.

**1-11 Ground Operations.** Those aircraft operations, which are not flight operations, for which the Government assumes at least some of the risks of loss or damage under the ground and flight risk clause of the contract. Specific operations include, but are not limited to, aircraft towing, subsystem warmup/checkout, taxiing, engine run, or other operation of installed engines, and/or propeller(s) or rotor(s), as appropriate; preflight/postflight and operation of associated aerospace ground support equipment to include crash rescue operations and operation of any Ground Test Vehicle (GTV).

#### SECTION C - TERMS RELATING TO AIRCRAFT

**1-12 Test Aircraft.** Any aircraft used for research, development or test and evaluation purposes.

**1-13 Production Aircraft.** Any aircraft being manufactured for use in the operational inventory, including aircraft produced for a Defense Security Assistance Program or undergoing contractor maintenance or modification.

a. **Preaccepted Aircraft.** Any aircraft for which the DD Form 250, Material Inspection and Receiving Report, for a specific contract has not been executed by the Government but for which the Government has assumed some of the risk of loss, destruction, or damage.

b. **Accepted Aircraft.** Any aircraft for which the DD Form 250 for a specific contract has been executed by the Government.

**1-14 Government-Furnished/Bailed or Leased Aircraft.** Any Government-owned aircraft provided to a contractor for use in conjunction with a specific contractual requirement.

**1-15 Type/Design Aircraft.** The type aircraft refers to the aircraft's functional role and is represented by a letter of the alphabet. The design of an aircraft is designated by a number. Examples of aircraft by type/design are for fighter aircraft, the F-16; for cargo, the C-135; for attack, the A-6; for trainers, the T-37; for bombers, the B-1; and for helicopters, the CH-47.

**1-16 Series Aircraft.** The alpha character following the type/design identification letter-number. Series denotes subsequent production or modification of the same type/design aircraft. Examples of type/design/series identification are the F-16A and the F-16C, the C-135A and the C-135B, or the CH-47C and the CH-47D.

**1-17 Mission of Aircraft.** Mission is denoted by the first letter when two letters are used to identify type/design aircraft. The first letter is used to identify the normal mission role of the aircraft. Examples of mission/type/design are for reconnaissance aircraft, RF-4C; for tanker aircraft, KC-135; for cargo helicopters, the CH-47.

**1-18 Army Standard Aircraft.** Those aircraft listed in AR 700-138.

**1-19 Army Nonstandard Aircraft and Contractor-Furnished Aircraft.** Any aircraft not listed in AR 700-138 plus aircraft furnished by the contractor (Turnkey operations).

#### SECTION D - TERMS RELATING TO FLIGHTS

**1-20 Sortie.** A flight of 30 minutes or more in which the crewmember occupies their primary crew station for the entire flight and performs all normal crew duties to include preflight and postflight.

**1-21 Experimental Test Flights.** Flights that are conducted to determine or demonstrate critical operating characteristics of an aircraft. These flights often involve greater than normal risk. These include, but are not limited to:

a. Initial flights of a new mission, type/design or series aircraft, high angle of attack tests, flutter and loads tests, and critical stores separation tests.

b. Flights to determine or expand flight or propulsion system envelopes.

c. Flights to initially determine the performance, flight characteristics, and handling qualities.

d. Flights of experimental and research aircraft.

e. Flights of an aircraft whose flight characteristics may have been altered by configuration changes.

f. Initial flights of the first production aircraft of a new mission, type/design, or series.

g. Initial flights of the first of those aircraft which have undergone "major modification" as determined by the Program Manager.

h. Component development flights where failure of the test component would make the flight hazardous in nature and/or involve greater than normal risk as jointly determined by the GFR and the Program Manager.

#### **1-22 Engineering Test Flights**

a. Subsystem development flights (e.g., autopilot, fire control, bombing/navigation systems).

b. Component development and reliability flights not included under paragraph 1-21h, above.

c. Flights where the aircraft serves as the vehicle carrying the item to be checked (e.g., electronic countermeasure stores, checking a radar system, or firing of a missile).

**1-23 Check Flights.** Flights to determine compliance with contractual requirements, including:

a. Any flight performed to accept or check new aircraft production.

b. Any flight performed to accept or check accomplishment of depot maintenance, contract maintenance, or modification.

c. Any flight performed to determine whether an aircraft or its various components are functioning according to predetermined specifications when subjected to the flight environment.

#### **d. Maintenance Test Flight**

(1) Any flight performed to accept or check accomplishment of depot maintenance, contract maintenance, or modification.

(2) Flights performed to determine whether aircraft and its various components are functioning according to predetermined specifications while subjected to the flight environment.

#### **1-24 Support Flights.** These include:

a. Photographic.

b. Chase/pace.

c. Rescue and recovery.

d. Target or target towing.

e. Aircraft delivery.

f. Demonstration flights conducted according to AR 95-1, Navy OPNAVINST 3710.7 series, or AFR 60-18.

g. Severe weather evacuation flights conducted according to AR 95-87, OPNAVINST 3730.3 series, AFR 55-4, or appropriate overseas command directives.

h. Cargo and/or personnel transport flights. This includes flights of an emergency nature.

i. Aircrew evaluation, training, and proficiency.

j. Product or mission support flights as directed by the Services.

## Chapter 2

### GOVERNMENT FLIGHT REPRESENTATIVE

**2-1 GFR Designation.** The approving authority designates a GFR for contractor facilities where the Government has assumed some of the risk of loss for aircraft. The approving authority may also designate an alternate GFR at the contractor facility. The contractor shall be provided and shall maintain an informational copy of applicable GFR letters of appointment.

**2-2 GFR Cognizance.** The GFR having cognizance of the contractor facility approves, in writing, flight crewmembers, qualifications training, and the contractor's Procedures. The contractor shall not conduct any operation for which the Government has assumed some of the risk of loss without approved Procedures. Subsequent to approval, the GFR will notify the contractor, in writing, with a copy to the ACO, of the conditions found unreasonable, and therefore unacceptable, which the contractor must correct within a reasonable time. If the contractor fails to act promptly to correct the unreasonable conditions, the GFR refers the matter with a recommendation to the ACO for a decision as to the termination of the Government's assumption of risk for loss of Government aircraft.

**2-3 GFR Responsibilities.** The GFR is responsible for surveillance of all contractor aircraft flight and ground operations involving Government aircraft and other aircraft for which the Government assumes at least some of the risk of loss. All flights and Procedures for ground operations of installed engines and/or propeller(s), engaging of rotors, taxi, and towing of Government aircraft conducted by the contractor are subject to final approval by the GFR. When the contractor is not acting in accordance with Procedures prescribed in the contract, test plans, this manual, or other applicable directives, or if safety is jeopardized, the GFR may withdraw approval of the flights and/or Procedures.

**2-4 Procedure Review Requirements.** The contractor will give the GFR a copy of contractor's Procedures for review to ensure currency and compliance. Reviews will be conducted at least every 12 months and within 90 days of a change of the primary GFR (review cycle may exceed 12 months in this case). The contractor keeps written records of the review dates and action taken on GFR Procedures reviews. These records will be maintained for at least 1 year.

## Chapter 3

### FLIGHT OPERATIONS PROCEDURES

#### SECTION A - PREPARATION OF PROCEDURES

**3-1 Preparation.** The contractor shall prepare and maintain specific, written Procedures, separate and distinct from industrial procedures, that describe aircraft ground and flight operations at all operating facilities. These Procedures must describe how the contractor ensures that individuals only perform duties they are qualified for or authorized to perform. The GFR for each facility may assist but will not actually prepare these Procedures.

**SECTION B - CONTENT OF PROCEDURES.** The requirements, as stated, are minimums and will be included in the contractor's Procedures. The Procedures will address the following minimum areas:

**3-2 Flight Management.** This area will describe:

a. Contractor facilities for flight planning.

b. Procedures for obtaining GFR approval for all flights, including advanced planning, to avoid situations where personnel designated to approve flights are not available. Flight schedules will be prepared with sufficient leadtime to preclude interruption to either Government or contractor operations. When a type of flight is conducted repeatedly for the same purpose, the approval may be for each or any number of flights at the discretion of the GFR. Flights approved singly or as groups must be:

(1) Conducted by contractor flight crewmembers approved by the GFR in a specified flight area, route, or course.

(2) Performed according to a Government approved flight test plan. Experimental and engineering test flights require a test plan.

(3) Within applicable safety or engineering limitations.

(4) In accordance with the approved Procedures.

(5) Approved for not more than a 1-month period.

c. The individual(s) employed by the contractor, by position or title, responsible for giving written flight authorization.

d. Procedures governing the use of mixed flight crewmembers (contractor and Government) in multi-place aircraft or formation flights.

e. Procedures for designating pilot-in-command of aircraft with more than one pilot and for formation flights, to include mixed flight crewmembers (contractor and Government).

f. Minimum crew requirements for the various types of flight activities.

#### 3-3 Aircrew Duty and Rest Limitations

a. The following crew duty period restrictions apply to all contractor flight crewmembers/noncrewmembers.

(1) The crew duty period begins when an individual reports for work (either flight or administrative duties) and ends when the engines are stopped at the end of a mission or series of missions.

(2) The basic crew duty period will not exceed 12 consecutive hours. (Exception: The GFR may grant extensions to the crew duty period of not more than 2 hours on a case-by-case basis.)

(3) When flying support flights in dual-piloted aircraft with an operative autopilot installed and used, the maximum crew duty period may be 16 consecutive hours.

(4) When flying other than support flights, pilots in single-piloted helicopters are limited to a maximum of 6 flying hours in a 12-hour crew duty period.

b. The crew rest period is the nonwork period immediately preceding the crew duty period. This period will be a minimum of 12 hours with at least 8 hours allowed for sleep.

**3-4 Publications.** This area will include:

a. A flight crew information file (FCIF) and the requirement for flight crewmember and noncrewmember review prior to flight. Interim changes or revisions to the approved Procedures will be included in this file.

b. The requirement that only current, up-to-date publications are used. Contractor personnel will use Government technical manuals and checklists in all flight operations where applicable technical data has been published. The contractor obtains military technical manuals, changes, and supplements through Government channels. Where only commercial manuals are available, the contractor is respon-

sible for obtaining them and ensuring that changes and supplements are promptly posted in the basic technical publications so that personnel have available the most current technical data. For Federal Aviation Administration (FAA) certified aircraft, the contractor will maintain all applicable Airworthiness Directives and Service Bulletins for review. Locally devised checklists may be used only when such deviation is authorized by the appropriate procuring activity. Mixed crews (Government and contractor) performing flight crewmember or maintenance tasks must use identical checklists.

**3-5 Qualifications and Training.** This area will include:

a. The contractor's flight crewmember qualification process. When circumstances dictate, the GFR may authorize some contractor flight crewmembers to be qualified and current in more than one aircraft after review of individual qualifications as they relate to the various aircraft to be operated. Contractor's flight crewmembers who are qualified in other than military aircraft will have their records so noted, but approval for such additional qualification will not be the responsibility of the GFR. Generally, the operation of civil aircraft will not contribute to currency and proficiency requirements for the operation of Government aircraft unless the civil and Government aircraft are similar in handling qualities and have basically the same engineering systems (fuel, electrical, hydraulic, etc.), as determined by the GFR. A civil aircraft may be counted as the second aircraft for maintaining the currency requirements of chapter 7, provided it meets the requirements of paragraph 7-1, as determined by the GFR.

b. Maintenance of qualification and training folders for flight crewmembers and noncrewmembers.

c. Inspection of flight crewmember training and records folders.

d. Flight crewmember qualification for varying flight conditions and flight activities. Procedures will include methods to ensure flight crewmembers who will operate aircraft during night or instrument meteorological conditions are currently qualified for these flight conditions.

e. Criteria for standardization and evaluation of flight crewmembers.

f. Procedure for requesting Government approval of qualification training.

g. Procedure for requesting approval of contractor flight crewmember.

h. Documentation of qualification and experience (e.g., certificates, licenses, logbooks, permits, instrument ratings, etc.).

i. Procedure and criteria for selecting and designating contractor flight crewmember instructors, flight examiners, etc.

j. Procedure for termination of approval.

**3-6 Safety.** This area will include:

a. A written mishap prevention program which includes:

(1) Contractor's consolidated safety council to promote a program of accident prevention in flight, ground, industrial, and explosive activities as they apply to flight operations. If such procedures already exist, they may be referenced in the Procedures.

(2) Regular flight safety surveys (at least semiannually) using the following references as guidelines: (1) Army - the U.S. Army Safety Center (USASC) Guide to Aviation Resource Management for Aircraft Mishap Prevention; (2) Navy - the Naval Safety Center (NAVSAFECEN) 3750 P1 Safety Review Checklist; (3) Air Force - AFR 127-2, including Major Command (MAJCOM) supplements; and (4) DLA - DLAM 8220.3, Flight Operations and Flight Safety Manual

(3) Safety publications.

(4) Published safety responsibilities.

(5) Hazard, mishap reporting, and correction procedures.

(6) Regularly scheduled monthly flying safety meeting, if required by the GFR.

(7) Fire protection and prevention program.

(8) Foreign object damage (FOD) prevention program that identifies the responsibilities of all personnel concerning the prevention of FOD to aircraft.

(9) Tool control requirements.

b. A premishap plan which includes, as a minimum: (1) Designation of aviation safety official with specific duties and responsibilities.

(2) Aircraft rescue and firefighting procedures.

(3) Preaccident and crash alarm systems plan which include a current roster of Government personnel (duty or nonduty phone) to be notified of aircraft

mishap. This plan must include the Procedure for contractor and subcontractor cooperation and participation in mishap investigation conducted by the Government.

(4) Provisions for search and rescue procedures.

(5) Procedures for medical examination of flight crewmembers, noncrewmembers, passengers, official observers, and ground personnel involved in an aircraft mishap. In the event of a physiological incident, or when the nature of the mishap causes injury to the flight crewmembers/personnel or causes substantial damage to the aircraft, an FAA approved or military flight surgeon medical examination is required.

c. Aircraft ground handling, Procedures, and practices. Chapter 8 provides minimum guidance for this area.

**3-7 Flight Crewmember Requirements.** This area will include:

a. Detailed qualification, requalification, and upgrade qualification programs must be outlined in the contractor's Procedures. These include the expiration dates for recurring training requirements, as well as the Procedures used to assure that flight crewmembers do not fly if training requirements have not been met.

b. Ground Training Requirements:

- (1) Land survival training.
- (2) Water survival training, if applicable.
- (3) Life-support equipment training.
- (4) Egress training.
- (5) Physiological training.
- (6) Ground school requirements.
- (7) Emergency Procedures training, simulator,

when required by the GFR.

c. Flying Requirements:

- (1) Annual flying time/sorties (see chapter 7).
- (2) Annual proficiency flight evaluation.
- (3) Annual instrument flight evaluation, if required.
- (4) Annual maintenance test flight evaluation, when required by the Army.
- (5) Who may administer flight evaluations.
- (6) Current military or FAA flight physical, as determined by the Service.
- (7) Postmishap flight evaluation, if required.

**3-8 Noncrewmember Requirements.** This area will include:

a. Procedures for contractor selection and flight status approval.

b. Determination of contents and maintenance of records folder.

c. Flying Requirements:

(1) Physiological training. NOTE: This requirement may be waived by the GFR for individuals required to perform a one-time function (see paragraph 5-6).

(2) Qualification Procedures.

(3) Egress training (see paragraph 5-7).

(4) Current military or FAA flight physical, as determined by the Service, if required.

(5) Contractor physical requirements.

(6) Life-support equipment training.

**3-9 Passenger Transportation Procedures.** This area includes Procedures for submitting contractor personnel or other passenger transportation requests, including orientation flights, on Government aircraft through the GFR to the appropriate military command for approval. Passengers are restricted from the following types of flights: experimental test flights; engineering flights; acceptance, functional, maintenance test, or production check flights.

**3-10 Planning and Flight Mission Procedures**

a. Prepare mission profiles for each type of flight regularly conducted by the contractor's flight crewmembers and covered in the Procedures. Prescribe specific geographical areas or point-to-point routes and flight-following procedures for conduct of flights.

b. Mission profiles and specified geographical areas must make maximum use of ground radar, radio communications, or chase/pace aircraft to monitor position and status of aircraft.

c. Crew briefings should include, but will not be limited to:

- (1) Station and takeoff times.
- (2) Primary mission, to include mission support aircraft, weather, crewmember duties, routes and ranges, communications, specific mission Procedures, all planned flight events, recovery, and landing.
- (3) Alternate mission.
- (4) Life-support systems and equipment.
- (5) Emergency Procedures (including hand signals in tandem seat aircraft) in the event normal communications become inoperative.

- (6) Security assigned to the mission.
- (7) Ground coordination Procedures.
- (8) Passenger briefing.
- (9) Mission debriefing after each flight.
- (10) Formation/chase Procedures.
- (11) Lost communication procedures.

d. The contractor's Procedures will, as a minimum, cover the items below. If the contractor flight activity is physically located at a fully operational civil or military airfield, the contractor will comply with local directives and execute an agreement with the airfield authority.

- (1) Weather minimums.
- (2) Traffic control tower requirements.
- (3) Filing of flight plans.
- (4) Standard operating Procedures, to include:
  - (a) Radio failure.
  - (b) Landing gear malfunction.
  - (c) Crosswind landing criteria.
  - (d) Airdrome traffic procedures.
  - (e) Emergency procedures, to include procedures for use of fire equipment, barriers and arresting gear, if applicable.
  - (f) Controlled bailout/ejection and jettisoning areas, if applicable.
  - (g) Arming and disarming, if applicable.
  - (h) Minimum fuel procedures.
  - (i) Procedures to maintain and use personal life-support equipment. Aircrew flight equipment must meet or exceed Service requirements.
  - (j) Severe weather plans.
  - (k) Provisions for determining weight and balance of each aircraft before flight.
  - (l) Laser operations.
  - (m) Live fire and gunnery.

3-11 Unlawful Seizure Procedures. This area will establish Procedures to prevent the unlawful seizure of aircraft.

3-12 Experimental and Engineering Operations. This area will address differences in contractor flight operations of experimental tests, engineering tests, and associated ground operations of Government aircraft as separate sections within the Procedures.

3-13 Drug Free Work Force Program. The contractor will have a program to minimize the potential for personnel (flight crewmembers, noncrewmembers, and ground personnel) under the influence of drugs or alcohol from performing any function that affects aircraft operations. For example, such a program

should include drug education and drug testing programs to ensure a drug free work force.

#### SECTION C - APPROVAL

3-14 Approval of Procedures. The contractor forwards the completed Procedures to the GFR for approval. The Procedures for each operating location must be approved by the GFR assigned. Current copies of these Procedures shall be maintained by the contractor at each facility. Furnish a list of the approved flight crewmembers to all remote or geographically separated operating locations. The contractor will not begin flight or ground operations until the Procedures have been approved in writing by the GFR.

#### SECTION D - DEFICIENCIES

3-15 Procedure Deficiencies. The contractor will be notified by the GFR if the Procedures are deficient, inadequate, or outdated. Failure of the contractor to correct the Procedures within a specified time is grounds for withdrawal of the GFR's approval of the flight crewmembers and contractor's Procedures. Flight operations conducted after such withdrawal are deemed operations without the approvals required by applicable clauses of the contract.

#### SECTION E - NONCOMPLIANCE

3-16 Noncompliance With Approved Procedures. The contractor and ACO will be notified by the GFR if the approved Procedures are not being complied with or dangerous practices develop. Oral notification by the GFR will be followed by a formal written statement fully outlining the deficiencies, as a matter of contract record. Failure to comply with approved Procedures or development of a dangerous practice is unacceptable and therefore an unreasonable condition within the meaning of the clause of the contract. This is grounds for termination of the Government's assumption of risk for loss or damage to Government aircraft. The Government reserves the right to take such other action as may be necessary for preserving the aircraft.

#### SECTION F - REVISION

3-17 Review System. The contractor shall establish a Procedures review system. Whenever the Procedures need revising, the contractor shall submit revisions with supporting documents to the GFR for approval.

## Chapter 4

### FORMS AND RECORDS

**4-1 DD Form 1821, Contractor-Crewmember Record.** Use DD Form 1821, Office of Management and Budget (OMB) Approval No. 0704-0188, to record individual flight crewmember records and approval to operate Government aircraft.

**4-2 Training Folder.** Maintain a training folder on each flight crewmember/noncrewmember while in training status. This folder shall serve as a management tool to record training progress and assist in the orderly progression of training. The folder contains:

- a. A record of qualification training.
- b. A record of the grade and date of the current aircraft and aircrew examinations.
- c. Hours, types, and dates of ground schools completed.
- d. Each training and checkout flight numbered with a resume as to the areas covered, including how the trainee performed during that training period.

e. Record of training requirements' prerequisites.

**4-3 Records (Flight Crewmember).** Maintain a record folder for each flight crewmember after the completion of training and qualification. Include in the record folder:

- a. A completed training folder as required in paragraph 4-2, above for at least 1 year.
- b. Copies of GFR flight crewmember approvals. Include documented records of any completed special training which is needed to perform all maneuvers required to conduct the test, functional/acceptance check flights, and mission profile; e.g., formation, refueling, instrument, night, low level, etc.
- c. Certification of current military flight physical or FAA medical certificate.

d. Completed copies of the latest aircrew proficiency examinations.

e. Certification of physiological training and altitude chamber, when required.

f. Certification of applicable life-support, egress and survival training required by the contractor's Procedures.

g. A copy of all applicable FAA certificates and records of other qualifications.

h. A copy of all flight evaluations for a minimum of 2 years.

**4-4 Records (Noncrewmember).** Maintain a records folder for each noncrewmember. Include in this folder:

a. A completed copy of contractor's noncrewmembers' authorization to fly.

b. Medical certification.

c. Certification of training and qualifications as required by the contractor's Procedures.

d. Certification of physiological training and altitude chamber, when required.

e. Certification of applicable life-support, egress and survival training required by the contractor's Procedures.

**4-5 Flight Time Records.** Maintain a record of flight time by mission, type/design, or series of aircraft depicting date and condition of flight for each flight crewmember.

**4-6 Access to Records.** Crewmember/noncrewmember training folders, flight time records, and record folders will be available to the GFR and other appropriate Government personnel at the request of the GFR.

**4-7 Records (Ground Personnel).** See paragraph 8-5.



## Chapter 5

### QUALIFICATION REQUIREMENTS

**5-1 General Qualifications.** Minimum qualifications for approval of contractor flight crewmember, for test and other flight categories, are listed below. However, they are only minimums and such factors as total experience, currency of experience, experience in similar aircraft, type of flying experience, and other related factors will be evaluated by the GFR before approving a contractor flight crewmember. All pilots will have an FAA Commercial Pilot or Airline Transport Pilot rating and the appropriate category endorsements. Flight engineers will have an FAA Flight Engineer Certificate and appropriate category endorsement. NOTE: For contractors located in foreign countries, the appropriate civil aviation authority or foreign military department ratings may be substituted for FAA ratings when authorized by the approving authority.

#### **5-2 Experimental Test Flights and Associated Experimental Ground Operations**

a. Pilot. Not less than 1,500 hours first-pilot time, to include 100 hours as first-pilot during engineering and/or acceptance flights listed under the functional flight category. Graduation from a military test pilot school (TPS) is required.

b. TPS Waiver. When the contractor pilot is not a graduate of a military TPS, the education and experience requirements listed below must be met as a basis of consideration for TPS waiver. Requests for waivers will be submitted to the GFR who forwards the request with recommendations, through channels as appropriate, to: Headquarters, U.S. Army Materiel Command; Headquarters, Air Force Systems Command/TE; Headquarters, Air Force Logistics Command/IG; or Headquarters, Naval Air Systems Command (AIR42C). Exception: For Air Force Logistics Command (AFLC) contracts, a pilot who is not a graduate of military TPS must receive a TPS waiver from HQ AFLC/IGF.

(1) Pilots must have at least 2,000 hours first-pilot time in comparable aircraft (e.g., helicopter, fighter/attack, cargo, or other). Additionally, 200 hours of first-pilot time during engineering flight test and 10 hours during experimental flight test are required.

(2) Education and experience requirements are as follows:

(a) An undergraduate or higher degree in an aerospace related engineering or aerospace related scientific discipline plus 1 year of applicable engineering test experience.

(b) An undergraduate or higher degree in any other engineering or scientific discipline plus 2 years of applicable engineering test experience.

(c) Any nonengineering undergraduate or higher degree plus 3 years of applicable engineering test experience.

(d) No degree, 4 years of applicable engineering test experience.

c. Flight Engineer. Not less than 1,000 hours of flight engineer time to include 500 hours of engineering or experimental flight test in comparable aircraft (e.g., helicopter, fighter/attack, cargo or other).

#### **5-3 Other Flights (Engineering Test, Check Flights, and Support Flights)**

a. Pilot. The pilot must be qualified in mission, type, design, and if appropriate, series of aircraft. He/she must have not less than 1,000 hours first-pilot time. In addition:

(1) For fighter, attack, and trainer aircraft, the first pilot time must include 100 hours in the same aircraft type.

(2) The first-pilot time for other aircraft must include 300 hours in the same aircraft category (table 5-1).

b. Copilot. The copilot must have not less than 500 hours first-pilot time and be qualified in mission, type, design, and if appropriate, series aircraft.

#### **c. Maintenance Test Pilot (MTP) (Army)**

(1) Army Standard Aircraft. Maintenance test flights will be conducted by a graduate of the Army Aircraft Maintenance Officers Course (AMOC) Phase II or complete an equivalency evaluation performed by the United States Army Aviation Logistics School (USAALS). The contractor will submit requests for equivalency evaluation to the GFR who forwards the request through the procuring command MACOM Aviation Office to the Commandant, USAALS, Fort Eustis, VA 23604-5431.

(2) Nonstandard Army Aircraft. For nonstandard Army aircraft and contractor-furnished aircraft, maintenance test flights will be accomplished by pilots designated in writing by the GFR, upon request from the contractor.

d. Flight Engineer. The flight engineer must have 1000 hours flight engineer time of which 300 hours must be in the same aircraft category and he/she must be qualified in the mission, type, design, series of aircraft.

**Table 5-1 Aircraft Categories**

1. Reciprocating airplanes with maximum gross weight less than 12,000 pounds.
2. Reciprocating airplanes with maximum gross weight more than 12,000 pounds.
3. Turbo prop airplanes with maximum gross weight less than 100,000 pounds.
4. Turbo prop airplanes with maximum gross weight more than 100,000 pounds.
5. Jet airplanes with maximum gross weight less than 75,000 pounds.
6. Jet airplanes with maximum gross weight from 75,000 to 500,000 pounds.
7. Jet airplanes with maximum gross weight more than 500,000 pounds.
8. Single rotor helicopter.
9. Tandem rotor helicopter.
10. Tilt rotor.

**5-4 Qualification in Mission/Type/Design/Series Aircraft.** In addition to the minimum flying hour requirements in paragraph 5-2 or 5-3, the following are minimum prerequisites to qualify in any specific type aircraft. GFR approval depends on experience and proficiency equal to the type of flying contemplated or conducted. A comprehensive written examination on the applicable mission, type, design, and if appropriate, series of aircraft must be completed. Knowledge of all the aircraft systems, including normal and emergency procedures, must be demonstrated to an instructor pilot approved by the GFR. This demonstration may be made while the aircraft is on the ground, in the air, or in a compatible simulator, as determined by the GFR. Initial training will be in a specific mission, type, design, and if appropriate, series aircraft. Emphasize differences in series aircraft and any special equipment or systems during training. In addition to flight requirements listed below, the GFR may re-

quire night flying (up to 5 hours) and instrument practice (up to 5 hours) or until a satisfactory degree of proficiency is demonstrated if contractor pilots are to fly under these conditions. Instrument currency is a prerequisite for night currency.

a. Pilots. A minimum of 10 hours and 10 dual or supervised landings. For helicopters, 10 dual autorotations with power recovery will be added to this requirement. These requirements must be accomplished in the mission, type, design, and if necessary, series aircraft for which approval is requested.

b. Copilots. A minimum of 5 hours and five dual or supervised landings are required in the mission, type, design, and if necessary, series aircraft for which approval is requested.

c. Flight Engineer. A minimum of 100 hours are required in the mission, type, design, and if necessary, series aircraft for which approval is requested.

d. Other Flight Crewmembers. These personnel will receive initial ground and flight training to qualify the individual for the crew position. A comprehensive written examination must be completed. They must demonstrate a knowledge of applicable aircraft systems, including normal and emergency Procedures, to an instructor qualified in the crew position.

e. Maintenance Test Pilot (MTP) (Army). In addition to the proficiency requirements of subparagraph a, above, MTPs must annually demonstrate academic and flight proficiency in the performance of maintenance test flight procedures.

#### **5-5 Currency Requirements**

a. Pilots or copilots will accomplish a minimum of one takeoff, one instrument approach (if required to operate by instrument flight rules), and one landing every 45 days in each type/design aircraft. To regain currency, a takeoff and landing must be accomplished under supervision of flight examiner (FE) or instructor pilot (IP). A pilot or copilot who exceeds 90 days without a takeoff and landing requires a flight evaluation as outlined in paragraph 7-3.

b. Navigators, flight engineers, and other flight crewmembers will perform their primary aircrew function during a sortie every 60 days in each type/design aircraft. To regain currency, this function must be accomplished under the supervision of an in-

structor. Flight crewmembers who exceed 120 days without a sortie require a flight evaluation, as outlined in paragraph 7-3.

**5-6 Physiological Training.** All flight crewmembers/noncrewmembers will receive physiological training (exclusive of altitude chamber). Physiological training for pilots and copilots will include vertigon simulator and/or other disorientation training to the maximum extent possible. Flight crewmembers and noncrewmembers will receive altitude chamber training before flight operations above 18,000 feet mean sea level (MSL). A current military flight physical or FAA medical certificate, as appropriate, must be presented prior to the altitude chamber training. Refresher training is required every 3 years unless exempted by an individual Service. The expiration date is the last day of the month in which the training is required.

**5-7 Egress and Emergency Training.** The contractor shall ensure that all flight crewmembers and noncrewmembers receive annual egress training. Training will be tailored to the type(s) of aircraft and crew position that the individual maintains qualification. Training will include a written closed book examination. Emergency training will cover a review of aircraft emergency equipment and Procedures (i.e., fire extinguisher training, use of smoke masks, etc.).

**5-8 Special Training/Qualifications.** The contractor shall ensure that flight crewmembers are properly trained in flight operations which require special maneuvers or qualifications; e.g., formation, refueling, instrument, night, low level, night vision devices, etc.

## Chapter 6

### FLIGHT CREWMEMBER/NONCREWMEMBER APPROVAL

**6-1 Requesting Officials.** Only contractor-designated requesting officials may submit requests for flight crewmember approval and for qualification training. Send a list of these officials to the GFR. The contractor or subcontractor revises the list, as necessary, to ensure currency.

**6-2 Government Approval for Qualification Training.** The contractor's requesting official forwards two copies of a request for approval for qualification training to the GFR for review/approval. The GFR keeps and files the original and returns the duplicate to the contractor. The contractor makes sure that flight crewmembers do not fly or initiate qualification training before receipt of Government approval. Observe the following guidelines:

a. The GFR is allowed 10 workdays for processing, reviewing, and approving or rejecting contractor requests for qualification training.

b. Following approval, training must be initiated within 90 days and completed without interruption. If interrupted for any reason, the contractor will coordinate resumption of training with the GFR.

c. Formal training courses offered by "Government activities" may be requested by the contractor to qualify or update the contractor's employees when in the best interest of the Government. Unless otherwise provided in the contract, the contractor may be required to reimburse the Government for such training.

**6-3 Government Approval for Flight Crewmember Status.** On completion of qualification training, the contractor's requesting official forwards two copies of a request for approval for flight crewmember status to the GFR. The GFR indicates action taken and returns a signed copy to the contractor within 10 workdays. The contractor will not use the flight crewmember in their aircrew specialties until receipt of Government approval.

**6-4 Contractor Approval for Noncrewmember Status.** The contractor's requesting official issues written approval to each contractor and subcontractor for noncrewmember(s) required to fly in Government aircraft, before the individual's first flight, with a copy to the GFR. The contractor's re-

questing official makes sure that each person is required and qualified to serve in a specific capacity while aboard military aircraft. The contractor keeps the written approval on file until the individual is no longer authorized to fly. In addition:

a. The contractor limits approved personnel to those needed to perform on the contract.

b. If the GFR determines that the written approval has been signed without adequate justification, the contractor is asked to remove the affected individual from flight status. If the contractor still believes that the individual should be allowed to fly, the contractor will resubmit the justification to the GFR who will refer the matter to the ACO. The contractor then makes sure that the above-mentioned individuals are not allowed to fly, pending the result of any appeal.

c. The contractor will review personnel assignments every 6 months. An updated listing of this review will be sent to the GFR for approval.

#### 6-5 Contractor Instructor Flight Crewmember

a. Only the most highly qualified, proficient, and experienced personnel are designated as instructor flight crewmembers as outlined in the Procedures. The GFR approves the instructor and documents the certification of instructor status (see enclosure 2).

b. Contractor instructor flight crewmembers may administer flight evaluations to other flight crewmembers employed by the contractor, if approved by the GFR.

c. Instructor pilots on Army contracts must possess a current FAA Flight Instructor Certificate with appropriate ratings or have completed a Department of the Army Instructor Pilot (IP) course in the category of aircraft. IP candidates who do not meet either of these requirements must complete an IP equivalency evaluation. These IP evaluations will be coordinated with the Directorate of Standardization and Evaluation at Fort Rucker, AL.

#### 6-6 Termination of Approvals

a. Approvals of flight crewmembers are automatically cancelled upon termination of employment, physical disqualification, or revocation of FAA

rating. The contractor notifies the GFR of such action by the most expeditious means and confirms, in writing, within 10 calendar days.

b. The contractor may request the GFR to terminate any approval. The contractor's requesting official makes this request in writing.

c. After completion of an appropriate investigation, the GFR will withdraw the approvals of flight crewmembers who have:

(1) Failed to meet the general requirements of basic airmanship and normal flight operations and to exercise sound judgment in the conduct of test or other flights.

(2) Exhibited evidence of personal instability or similar undesirable tendencies or have conducted themselves contrary to the Government's interests in promoting safety.

d. The GFR may withdraw the approvals of flight crewmembers who have failed to accomplish semiannual proficiency requirements.

e. The GFR promptly notifies the contractor and ACO when an approval is withdrawn. A written statement by the GFR to the contractor must set forth in detail the reasons for the action taken. If the contractor believes that the approval should not have been withdrawn, he/she may request a review of the matter by the ACO.

## Chapter 7

### FLIGHT CREWMEMBERS PROFICIENCY REQUIREMENTS

**7-1 General Requirements.** Contractor flight crewmembers maintain the proficiency requirements of this chapter in the designated Government aircraft and crew position. Proficiency applies to flights in the same type/design aircraft. An exception would be similar (airframe, power plant, and flight characteristics) civil aircraft when approved by the GFR. When there is not enough flight time available to fulfill semiannual proficiency requirements due to program startup, phase-down, or low production rate, the contractor may, with GFR approval, substitute 50 percent of the requirements of tables 7-1 through 7-3 in another similar Government aircraft, compatible simulator, or a civilian aircraft. **NOTE:** The similarity determination is valid for the life of the contract, but the approval for 50 percent substitution must be obtained for each applicable semiannual period. When flight crewmembers fail to maintain currency and proficiency, they will not be permitted to fly as flight crewmembers on Government aircraft except for appropriate recurrency training, as approved by the GFR. Required additional flying training time is not furnished at Government expense unless provided for in the contract. The requirements of this chapter are in no way a substitute for any currency or proficiency requirements as specified in applicable FARs as they apply to contractor flight crewmember FAA ratings. The following are proficiency requirements for various situations:

<u>Type</u>	<u>Requirement</u>
a. Single Government aircraft currency	100 percent
b. Multiple Government aircraft currency	50 percent per aircraft
c. One Government aircraft and one civilian aircraft (requires GFR approval)	50 percent minimum in the Government aircraft

**7-2 Minimum Requirements.** As outlined below and in the applicable tables 7-1 through 7-3, minimum requirements apply to the period covered by the flight operation phase of the Government contract. Semiannual minimums apply from 1 January through 30 June and from 1 July through 31 December, unless otherwise designated by the GFR. A flight crewmember performing on a contract for less

than a semiannual training period will accomplish a prorated share of the minimum requirements based on the percentage of the training period. Accomplishment of these proficiency requirements should be distributed evenly throughout the calendar period.

a. For pilots and copilots, the GFR may allow 30 sorties to substitute for the semiannual 35 flying hours requirement. Sorties and hours cannot be combined to fulfill semiannual requirements.

b. Up to 50 percent of each semiannual pilot and copilot requirement (hours, precision approach, non-precision approach, and instrument hours), as listed in the above referenced tables, may be substituted through the use of flight simulators. This activity must be approved by the GFR after ensuring simulator operation and cockpit configuration are similar to the applicable Government aircraft.

c. There is no requirement for contractor pilots and copilots to fulfill the night, instrument, or approach requirements, except in those cases where night or instrument flying by contractor personnel will be required. Those pilots maintaining night flying proficiency must also maintain instrument proficiency except in aircraft not certified for instrument flight. Pilots and copilots logging night instrument time in the aircraft may simultaneously apply this event to both night and instrument time requirements. Training and proficiency requirements for night currency and other events will be accomplished in the contractor's flying program under the provisions of the contract.

d. When applicable, training and proficiency requirements for operationally oriented flight events such as "pop up" weapons deliveries, low level operations, air refueling, and formation flying, etc., will be included in the contractor's Procedures or appropriately referenced to other documents. The Government will not furnish additional flying time for contractor flight crewmembers to accomplish these requirements, unless provided for in the contract.

e. The GFR may allow six sorties to substitute for the semiannual flying hour requirement for navigators and other flight crewmembers. Sorties

and hours cannot be combined to fulfill semiannual requirements.

f. Flight engineers must complete hourly and sortie requirements for the semiannual period.

**7-3 Evaluations.** Approved contractor flight crewmembers must be evaluated on their ability to perform assigned duties and designated flight tasks. Duties and tasks include operating all the aircraft systems related to their crew position. They must perform all assigned aircrew functions safely and effectively. Evaluations will be accomplished in accordance with the criteria for standardization/evaluation of flight crewmembers, as stated in the approved contractor's Procedures. Evaluations may be conducted as an integral part of the regularly scheduled flights.

a. **Proficiency Flight Evaluation.** All flight crewmembers will be evaluated in each aircraft in which they are maintaining qualification at intervals not to exceed 12 months. When a two-seat aircraft is not available, the evaluator may use a chase aircraft. Document all phases of the flight evaluation on the DD Form 1821. For those aircraft of similar mission, type, and design, but dissimilar series designations, the GFR determines which are considered like aircraft for the purpose of performing annual proficiency evaluations.

b. **No-Notice Evaluations.** Flight crewmembers are subject to no-notice flight evaluations. When a no-notice evaluation is administered by the Government instructor/evaluator, the Government may furnish the flying time (and incidental expenses) necessary to support this requirement, unless provided for in the contract.

c. **Ground Evaluation.** In conjunction with the flight evaluation, flight crewmembers will demonstrate their knowledge of emergency proce-

dures, critical action procedures, and aircraft associated systems through a GFR approved contractor open and closed book proficiency exam. The open and closed book exams must be successfully completed prior to the flight evaluation. The written examinations and the criteria for successful completion must be approved by the GFR. In addition, flight crewmembers will orally demonstrate their knowledge of contractor procedures applicable to their crew position. The GFR or designated representatives may randomly administer written examinations to evaluate flight crewmembers' general knowledge of procedures and aircraft systems.

**7-4 Proficiency Evaluator.** Proficiency flight evaluations or instrument flight evaluations, if applicable, are administered to the contractor flight crewmember either by the approved instructor/evaluator designated by the contractor or by a qualified Government instructor/evaluator at the direction of the GFR.

**7-5 Multiple Qualification.** Contractor flight crewmembers maintaining multiple qualification will accomplish a minimum of 50 percent of the requirements in tables 7-1 through 7-4 in each aircraft. Normally, currency in a maximum of two Government type/design aircraft will be authorized.

**7-6 Requalification.** When flight crewmembers fail to maintain currency and proficiency they will not be permitted to fly as crewmembers on Government aircraft except for appropriate recurrency training, as approved by the GFR. The instructor or flight examiner, with GFR approval, determines requalification training requirements and the extent of the subsequent evaluation. The Government will not furnish flying time for requalification training and evaluation unless provided for in the contract.

**Table 7-1. Pilot, Copilot Proficiency Requirements**

<u>Event</u>	<u>Semiannual</u>
Total Hours or Sorties	35 or 30
Landing--Total	12
Landing--Night	3
Night Hours	5
Instrument Hours	6
Precision Approach	6
Nonprecision Approach	6

**Table 7-2. Navigator Proficiency Requirements**

<u>Event</u>	<u>Semiannual</u>
Hours or Sorties	30 or 6
Cross-Country/Navigation Log*	2

\*Applicable as required by contract.

**Table 7-3. Flight Engineers' Proficiency Requirements**

<u>Event</u>	<u>Semiannual</u>
Hours	30
Sorties	6

**Table 7-4. Other Flight Crewmembers' Proficiency Requirements (see paragraph 1-5)**

<u>Event</u>	<u>Semiannual</u>
Hours or Sorties	30 or 6



## Chapter 8

### GROUND OPERATIONS

**8-1 Application.** This chapter applies to contractor personnel who perform ground maintenance functions on Government aerospace vehicles and/or operate ground support equipment.

**8-2 Procedures.** The contractor will have written Procedures to ensure that only trained, qualified, and/or certified personnel perform ground operations and aircraft rescue and firefighting. These Procedures must be approved by the Government. These Procedures can be separate from the contractor's flight operations Procedures and can be administered with the other provisions of this chapter by a contractor organization other than flight operations. The Procedures will include, but are not limited to:

- a. Contractor medical physical requirements.
- b. Qualification and requalification requirements.
- c. Certification Requirements. The contractor will train and certify their personnel annually in the procedures outlined below.
  - d. As a minimum, the contractor's Procedures shall address the following ground operations to ensure they are safely accomplished.
    - (1) Powered aerospace ground support equipment operation.
    - (2) Aircraft weapons, munitions, cartridge activated devices, laser, and explosive handling.
    - (3) Aircraft refuel/defuel, fuel system purging, and maintenance.
    - (4) Oxygen system servicing.
    - (5) Aircraft towing.
    - (6) Aircraft marshalling.
    - (7) Aircraft jacking.
    - (8) Egress system maintenance (ejection and extraction systems). Includes explosive operated canopy removal systems.
    - (9) Aircraft engine and auxiliary power unit (APU) operation.
    - (10) Aircraft taxiing by ground personnel, if applicable.
    - (11) Aircraft hydraulic system servicing and ground cooling.
  - e. Severe weather plan, to include mooring and tie down procedures.

**8-3 Engine Operations.** Ground personnel authorized by the contractor to start, operate (including taxi of airplanes), or test aircraft installed engines and/or aircraft APUs will annually (or as noted below):

- a. Receive practical instructions in starting and ground operation of engines, operation of steering, aircraft brake systems (both normal and emergency), radio operation, engine fire procedures, and all other applicable emergency procedures.
- b. Receive ground egress training (aircraft equipped with ejection or extraction systems, and/or explosive operated canopy removal systems).
- c. Receive ground evacuation training (aircraft not equipped with ejection or extraction systems).
- d. Pass a written examination, to include bold face and critical action emergency Procedures.
- e. Demonstrate (semiannually) their proficiency, including knowledge of warnings, cautions and notes, and emergency Procedures to certifying personnel. Personnel authorized to certify engine operators will be qualified, as above, and be approved by the GFR.
- f. Have operated the same type of engine in the same design aircraft at least once during the last 45 days.

NOTE: Helicopter engine ground operations will be performed by qualified and current pilots.

**8-4 Egress Familiarization Training.** Personnel (other than those certified to perform egress system maintenance and engine operation) who require access to cockpits equipped with ejection or extraction systems and/or explosive operating canopy removal systems will complete a general familiarization course annually on safety and knowledge of the hazards of these systems.

**8-5 Records/Documentation.** The contractor shall:

- a. Maintain records with documentation of training, certification, recertification, and medical examinations, as appropriate, of all ground personnel for which this chapter is applicable.
- b. Make the records available to the GFR and other appropriate Government personnel at the request of the GFR.

## Chapter 9

### ADDITIONAL ADMINISTRATIVE MATTERS

**9-1 Requests for Waivers.** A waiver is a written request for relief from a requirement of a contract or contracts. When approved, waivers will be valid no more than the length of the applicable contract. Send all waiver requests through the GFR to the ACO. The ACO will send the waiver to the procuring activity for coordination and approval. Waivers should only be granted on an exception basis and must be in writing.

a. Army - The Procuring Activity MACOM Aviation Office or U.S. Army Aviation Systems Command (AVSCOM) for AVSCOM contracts.

b. Air Force - Procuring Activity MAJCOM, Director of Operations.

c. Navy - NAVAIRSYSCOM (AIR 4213), Aircraft Controlling Custodian.

**9-2 Reports.** OMB approval 0704-0188 applies to DD Form 1821, Contractor-Crewmember Record.

## FORMAT FOR REQUEST FOR APPROVAL FOR QUALIFICATION TRAINING

**SUBJECT:** Request for Government Approval for Aircrew Qualification and Training

**TO:** Government Flight Representative (GFR)

I. Name \_\_\_\_\_ Crew Position \_\_\_\_\_  
Aircraft \_\_\_\_\_ Date of Birth \_\_\_\_\_  
Security Clearance \_\_\_\_\_ FAA Rating \_\_\_\_\_

II. Provide a resume of education background. (High school, name and location; college or university name, location and degree obtained; flight school and date completed; test pilot school and date completed; and special professional schools.)

III. Have you ever served in any branch of the U.S. Military Service? \_\_\_\_\_

If so, state: Branch \_\_\_\_\_  
Service Dates: From \_\_\_\_\_ To \_\_\_\_\_  
Last Location \_\_\_\_\_  
Highest Rank \_\_\_\_\_ SSAN \_\_\_\_\_ Aero Rating \_\_\_\_\_  
Are you now a member of the Reserves or National Guard? \_\_\_\_\_  
If yes, state: Branch \_\_\_\_\_ Present Rank \_\_\_\_\_

IV. Provide a resume of experience in the flight test field. Include both engineering and aircrew experience by project, type of aircraft, and hours flown.

### FLIGHT PHASE

V. I certify that I have read and understand all of the contractor's Procedures and directives pertinent to the accomplishment of my assigned duty.

\_\_\_\_\_  
(Signature of Flight Crewmember)

VI. I have verified the records of \_\_\_\_\_  
and it is requested that he/she be approved for qualification training as a \_\_\_\_\_  
(Crew Position)  
for experimental engineering/acceptance/production/functional/ support flights (delete one  
not applicable) in \_\_\_\_\_ type aircraft.

\_\_\_\_\_  
(Typed Name of Contractor's  
Requesting Official)

\_\_\_\_\_  
(Signature of Contractor's  
Requesting Official)

VII. \_\_\_\_\_ APPROVED \_\_\_\_\_ DISAPPROVED \_\_\_\_\_  
(Date of Approval or Disapproval)

\_\_\_\_\_  
(Typed Name of GFR)

\_\_\_\_\_  
(Signature of GFR)

Encl 1  
DLAM 8210.1, Vol 1  
AFR 55-22V1  
AR 95-20  
NAVAIRINST 3710.1C

#### PRIVACY ACT STATEMENT

**AUTHORITY:** 10 U.S.C. 8013, 44 U.S.C. 3101, and DLAM 8210.1, Volumes 1 and 2/AFR 55-22V1/AR 95-20/NAVAIRINST 3710.1C.

**PRINCIPAL PURPOSE:** Used to monitor and manage individual contractor flight and ground personnel records.

**ROUTINE USES:** Records from this system may be disclosed for any of the blankst routine uses published by the Air Force.

**DISCLOSURE IS VOLUNTARY:** However, failure to provide the information could result in disapproval to participate in the program.

**PRIVACY ACT SYSTEM OF RECORDS NOTICE F060 AF B applies.**

Encl 2  
DLAM 8210.1, Vol 1  
AFR 55-22V1  
AR 95-20  
NAVAIRINST 3710.1C

## FORMAT FOR REQUEST FOR APPROVAL OF CONTRACTOR FLIGHT CREWMEMBER

SUBJECT: Request for Approval of Contractor Flight Crewmember

TO: Government Flight Representative (GFR)

I. I have verified the records of (Crewmember's name) and it is requested that he/she be approved as a (Crew position) for experimental/engineering/check/support (as appropriate) flights in \_\_\_\_\_ type aircraft.

\_\_\_\_\_  
(Signature of Contractor's  
Requesting Official and Date)

1 ATT  
DD Form 1821

\_\_\_\_\_  
(Typed Name of Contractor's  
Requesting Official)

II. I certify that \_\_\_\_\_ has satisfactorily flown a proficiency flight check on (Date)

\_\_\_\_\_  
(Signature of IP/FE)

III. \_\_\_\_\_ Approved  
\_\_\_\_\_ Disapproved

\_\_\_\_\_  
(Signature of GFR)

\_\_\_\_\_  
(Typed Name of GFR)

\_\_\_\_\_  
(Date)

### PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 8013, 44 U.S.C. 3101, and DLAM 8210.1, Volumes 1 and 2/AFR 55-22V1/AR 95-20/NAVAIRINST 3710.1C.

PRINCIPAL PURPOSE: Used to monitor and manage individual contractor flight and ground personnel records.

ROUTINE USES: Records from this system may be disclosed for any of the blanket routine uses published by the Air Force.

DISCLOSURE IS VOLUNTARY: However, failure to provide the information could result in disapproval to participate in the program.

PRIVACY ACT SYSTEM OF RECORDS NOTICE F060 AF B APPLIES.

Encl 3  
DLAM 8210.1, Vol 1  
AFR 55-22V1  
AR 95-20  
NAVAIRINST 3710.1C

## **FORMAT FOR DESIGNATING GOVERNMENT FLIGHT REPRESENTATIVES**

(Service Letterhead)

**REPLY TO  
ATTN OF:**

**SUBJECT: Delegation of Authority**

**TO:**

1. Pursuant to DLAM 8210.1, Volumes 1 and 2/AFR 55-22V1/AR 95-20/NAVAIRINST 3710.1C, (name/rank) is hereby designated primary/alternate Government Flight Representative (GFR) (as appropriate) for (name of contractor(s)) and delegated authority to approve contractor personnel and procedures for operating aircraft under your jurisdiction for (name of contractor(s)) which the Government, by contract, assumes the risk for loss.
2. This authority is granted to you as an individual and is not to be redelegated. It is effective only so long as you remain qualified for flying status and in your present assignment, unless sooner terminated.
3. As the GFR, you shall assure that the procedures contained in DLAM 8210.1, Volumes 1 and 2/AFR 55-22V1/AR 95-20/NAVAIRINST 3710.1C, and appropriate Defense Federal Acquisition Regulation Supplement (DFARS) provisions including Departmental implementing instructions, are followed in the approval of contractor aircrew personnel and flight and ground operations procedures.

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(Signature of Approving Authority)